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AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (currently amended) A gas flow transducer apparatus with immunity to vibration or acceleration, the apparatus comprising:

a plurality of gas flow thermoanemometer-type transducer elements each sensitive to vibration or acceleration in at least one direction and generating an output signal proportional to gas flow and to a perturbation component resulting from said vibration or acceleration, ~~said elements being arranged on a common support;~~

a plurality of gas flow passages with constant cross-section leading gas flow from an inlet to an outlet through at least one of said elements, wherein said gas flow is always in a single, well-defined direction at one time;

said elements being arranged on said common support and connected to said passages such that at least one of said perturbation component and said gas flow is measured differently by said elements; and

circuitry receiving said output signal of each of said elements and outputting a vibration or acceleration immune output signal corresponding to said gas flow with said perturbation component substantially cancelled.

2. (original) The apparatus as claimed in claim 1, wherein said gas flow passages cause said gas flow to be equal through said elements.

3. (original) The apparatus as claimed in claim 2, wherein said gas flow is split between said elements.

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4. (original) The apparatus as claimed in claim 2, wherein said gas flow passes serially through said elements.

5. (original) The apparatus as claimed in claim 4, wherein two said elements are provided that are sensitive to vibration or acceleration along only one axis and are arranged parallel to one another, said gas flow passages being arranged such that said gas flow is in opposite directions through said elements.

6. (currently amended) A gas flow transducer apparatus with immunity to vibration or acceleration, the apparatus comprising:

a plurality of gas flow transducer elements each sensitive to vibration or acceleration in at least one direction and generating an output signal proportional to gas flow and to a perturbation component resulting from said vibration or acceleration;

a plurality of gas flow passages with constant cross-section leading gas flow from an inlet to an outlet through at least one of said elements, wherein said gas flow is always in a single, well-defined direction at one time;

said elements being arranged on said common support and connected to said passages such that at least one of said perturbation component and said gas flow is measured differently by said elements;

circuitry receiving said output signal of each of said elements and outputting a vibration or acceleration immune output signal corresponding to said gas flow with said perturbation component substantially cancelled; and ~~The apparatus as claimed in claim 1,~~

~~further comprising~~ a gas throughflow blocking member preventing gas flow in at least one of said elements, wherein said at least one of said elements measures only said perturbation component.

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7. (original) The apparatus as claimed in claim 6, wherein said at least one of said elements communicates with said gas flow such that said at least one of said elements is subjected to a same gas composition and temperature as other ones of said elements.

8. (previously amended) The apparatus as claimed in claim 1, wherein said elements are sensitive to vibration or acceleration along only one axis.

9. (previously amended) The apparatus as claimed in claim 1, wherein said apparatus comprises two of said elements.

10. (deleted)

11-14: previously deleted

15. (new) The apparatus as claimed in claim 6, wherein said elements are sensitive to vibration or acceleration along only one axis.

16. (new) The apparatus as claimed in claim 6, wherein said apparatus comprises two of said elements.

17. (new) The apparatus as claimed in claim 1, further comprising a gas flow receiver having a diaphragm, and wherein said plurality of gas flow passages are in communication with an upstream and a downstream side of said diaphragm.